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The Urban Water Transition: Why We Must Address the New Reality of Urbanization, Women, Water, and Sanitation in Sustainable Development

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Efforts to achieve universal water access have been underway for decades, focused on the immense challenges of providing basic water and sanitation infrastructure in rural areas, as well as upgrading outdated and inadequate service provision to the poor in the cities and towns throughout the developing world. However, a recent assessment conducted by the UN Environment Programme (UNEP) and the UN Human Settlements Programme (UN-HABITAT) in the run-up to the 2011 World Water Day exposed a worrying reality: throughout the world's most vulnerable regions, the number of people living without access to basic water and sanitation services is increasing as the process of rapid urbanization outpaces governments' capability to provide the necessary infrastructure (UN HABITAT 2011). In Africa, as the assessment highlights, the urban population lacking access to adequate drinking water increased from nearly 30 million to 55 million between 1990 and 2008, while simultaneously those lacking appropriate sanitation infrastructure doubled to 175 million in the same period (UN News Centre 2011).

As this unprecedented transition to an urban world continues, with more than 50% of the global population already living in cities as of 2008, projected to reach nearly 70% by 2050 (Birch 2011). The failure of planning, finance, and management mechanisms to deliver water on pace with the rate of urban growth represents one of the most urgent threats to the future of sustainable global development. This is particularly true in light of emerging consensus that the WASH (Water, Sanitation, and Hygiene) sector represents the foundation on which broader goals of poverty reduction, environmental sustainability, social development, and gender equality must be built. Critical here is understanding that, despite the wide-ranging and comprehensive changes in lifestyle which accompany a transition to urban settlement patterns, including fundamental alterations to the ways in which water is accessed, utilized, and disposed of, women and girls continue to shoulder the vast majority of the responsibility for domestic water provision and management (UN Water 2006). Thus, women and girls remain disparately impacted by inadequate water, sanitation, and hygiene service provision in the urban areas they now increasingly inhabit, despite having extremely limited input into the design and management of these systems and spaces.

While the process of urbanization critically reduces the average time spent by women collecting water when compared to their rural counterparts, the increased risk of contracting water-born diseases as the primary handlers of contaminated water, the serious challenges to reproductive health presented by a lack of clean water and hygiene services, and the added responsibility of providing care to children and other family members suffering from illness continue to effectively exclude many women and girls from educational and economic opportunities. In addition, new obstacles to water security are being presented throughout the world's rapidly expanding slum and informal settlements. Fundamentally, the very nature of the informal housing expansion that has been necessary to accommodate the rapidly growing urban population creates a reality of little to no security of land tenure and continuously changing social organization within those communities on the urban periphery most in need of stable and accessible water and sanitation services. This context, in turn, significantly limits the long-term viability and scalability of even those slum-upgrading programs and water improvement policies that adequately include women, already unsung community leaders in water use, in the design and management of local water resources.

The increasingly urban context in which the global water challenge must be addressed in the next 30 years is not, however, entirely bad news. Despite the new challenges presented by the scale and form of emerging mega-cities and informal settlements throughout the developing world, requiring new and innovative models of planning, financing, and managing urban water infrastructure, these cities and settlement patterns also present a potential efficiency of scale in basic service provision never possible in the rural context. Urban systems also present the best opportunity for a transition to integrated service management, leveraging investments in energy, transportation, water, and sanitation in order to create more innovative and environmentally sustainable human development and natural resource management.

With the urban population of the countries that currently constitute the developing world alone projected to reach 5.2 billion by 2050 (United Nations 2010), these potential gains in accessibility and quality of basic water and sanitation, if realized, will extend well beyond the realm of women's health and wellbeing. As U.S. Secretary of State Clinton recently asserted, "women who gain access to sanitation, who are freed from the burden of walking for hours each day just to locate and carry water, will find it easier to invest time and energy in their families and their communi-

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ties" (Clinton, H. 2010). Translated into purely economic terms, the UN estimates that 40 billion work hours are spent each year in Africa alone collecting and carrying water – the equivalent of a year's labor by the entire workforce of France (Lenton, et al. 2005). At the global level, the World Health Organization estimates that achieving the Water and Sanitation target of the Millennium Development Goals would produce an estimated $63 billion in economic gains per year (Hutton and Haller, 2004), a powerful illustration of the potential that sustainable urbanization, accompanied by the universal provision of basic water and sanitation services, holds for global development.

Finally, the global community now looks extremely unlikely to meet the Millennium Development Goals (MDG) target of providing basic water and improved sanitation infrastructure to half of the current 1.1 billion people worldwide who still lack access to potable water and the 2.6 billion without adequate sanitation systems by 2015 (United Nations 2010b, p. 61). It is clear that a paradigm shift towards forward-looking policies aimed at creating urban and peri-urban environments with infrastructure systems capable of facilitating the continued demographic shift into cities is necessary. However, just as in the case of small-scale interventions and slum-upgrading programs, if any comprehensive national or urban level policy focused on improving water and sanitation access and quality is to succeed, it must not only acknowledge the sheer magnitude of the demographic shift towards an urbanized planet, but also make a strong commitment to engaging women in the design and management of water and sanitation resources within cities in order to ensure equitable and sustainable development.

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